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APPLICATION NO.		FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/916,648		07/30/2001	Martin Birk	2000-0482	8483
26652	7590	09/12/2005		EXAMINER	
AT&T CORP.				TRAN, DZUNG D	
P.O. BOX 4	110				
MIDDLETOWN, NJ		07748		ART UNIT	PAPER NUMBER
			,	2638	

DATE MAILED: 09/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

			88
	Application No.	Applicant(s)	- DV
	09/916,648	BIRK ET AL.	
Office Action Summary	Examiner	Art Unit	
	Dzung D. Tran	2633	
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet	with the correspondence address -	••
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA - Extensions of time may be available under the provisions of 37 CFR 1.1: after SIX (6) MONTHS from the mailing date of this communication. If NO period for reply is specified above, the maximum statutory period of Failure to reply within the set or extended period for reply will, by statute any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUN 36(a). In no event, however, may a vill apply and will expire SIX (6) MC, cause the application to become a	IICATION. The reply be timely filed DIVITHS from the mailing date of this communicated the communicated by the communicated	
Status			
 1) Responsive to communication(s) filed on 25 Ag 2a) This action is FINAL. 2b) This 3) Since this application is in condition for allower closed in accordance with the practice under E 	action is non-final.		s is
Disposition of Claims			
4) ☐ Claim(s) 1-7 is/are pending in the application. 4a) Of the above claim(s) is/are withdraw 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1-7 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/o	·		
Application Papers			
9) The specification is objected to by the Examine 10) The drawing(s) filed on is/are: a) accomplicated any not request that any objection to the Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the Examine	epted or b) objected to drawing(s) be held in abey- tion is required if the drawir	ance. See 37 CFR 1.85(a). g(s) is objected to. See 37 CFR 1.12	
Priority under 35 U.S.C. § 119			
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority document 2. Certified copies of the priority document 3. Copies of the certified copies of the priority application from the International Bureau * See the attached detailed Office action for a list	s have been received. s have been received in rity documents have bee u (PCT Rule 17.2(a)).	Application No n received in this National Stage	
Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date	Paper No	v Summary (PTO-413) o(s)/Mail Date f Informal Patent Application (PTO-152) 	

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DETAILED ACTION

Specification

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 2. Claim 1 is rejected under 35 U.S.C. 102(e) as being anticipated by Thompson et al. U.S. Patent no. 6,282,005.

Regarding claim 1, Thompson discloses in Figure 4, a method for delivering a plurality of video blocks to a user terminal serviced by a remote node comprising the steps of:

receiving, by a first WDM 152 (col. 11, lines 12-13), a broadband signal from a broadband signal source 150;

separating, by said first WDM 152, said broadband signal into a plurality of optical bands (col. 11, lines 11-13);

modulating each of the plurality of optical bands with a composite signal representing data in a plurality of independent RF blocks (e.g., optical signal is modulated with Information (0r RF Information, see figure 5) by modulators 160, 162, 164) to form a plurality of modulated signals (col. 11, lines 28-30;

forwarding said plurality of modulated signals to a second WDM 166 to form a combined broadcast signal (col. 11, line 31);

transmitting said combined broadcast signal over feeder fiber 168 to a remote node 170; further transmitting said combined broadcast signal over distribution fiber to a user's site (e.g., figure 4 shown Information 1 to Information N to user's site); and selecting a RF block for distribution over a distribution fiber to a conventional satellite set-up box at a user's site (col. 8, lines 49-67).

Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claims 2-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thompson et al. U.S. Patent no. 6,282,005 in view of Lam U.S. Patent no. 6,721,506.

Regarding claim 2, Thompson discloses all the limitation except for optical bands match a Free Spectral Range (FSR) of a Waveguide Grating Router (WGR) at said remote node. Lam, from the same field of endeavor, discloses a method and system deliver multiple-band broadcast service in a network such as WDM PON (abstract) having WDM remote node 120 consists of wavelength router called wavelength grating router (WGR) operates at optical bands match a Free Spectral Range (FSR) of a

Waveguide Grating Router (WGR) (col. 1, line 34 to col. 2, line 40). At the time of the invention was made, it would have been obvious to an artisan to implement the teaching of Lam that is a method of deliver multiple-band broadcast service in a network such as WDM PON (abstract) having WDM remote node consists of wavelength router called wavelength grating router (WGR) operates at optical bands match a Free Spectral Range (FSR) of a Waveguide Grating Router (WGR) in the system of Thompson. One of skill in the art would have been motivated to do that in order to provide a bandwidth efficient way of delivering multiple broadcast service on such a network using broadband spontaneous emission optical source (col. 1, line 11-14 of Lam)

Regarding claims 3 and 4, Lam discloses forwarding step further comprises the step of selecting a stack of RF blocks using an optical filter nominally matched to one of said first WDM's optical bands at said user's site, wherein said stack of RF blocks represents one optical band of said plurality of optical bands and bandpass filtering said block-converted stack of RF blocks to retrieve said selected RF block (col. 4, line 40 to col. 5, line 34).

Regarding claim 5, Lam discloses in figure 15, combined broadcast signal (e.g., from 1510) is passively split (e.g., by WDM 1520) and introduced to said WGR 1530 on a plurality of said WGR's input ports.

Regarding claim 6, Lam discloses EDFA or PDFA for amplifying broadcast signal (col. 3, lines 17-19). Furthermore, it is notoriously known that optical amplifiers can be

placed anywhere along the transmission path in an optical system to boost the signal and to restore the signal to a desire level.

5. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Thompson et al. U.S. Patent no. 6,282,005 in view of Lam U.S. Patent no. 6,721,506 and further in view of Lu et al. U.S. Patent no. 5,880,865.

Regarding claim 7, Thompson and Lam disclose all the limitation except for delivery of a plurality of video blocks is augmented to additionally include delivery of switched services by using an additional narrowband signal source to provide a narrowband signal and by using an additional coarse WDM (CWDM) to detect and select said switched services prior to introduction of said passively split combined broadcast signal to said WGR. Lu discloses in figure 7, delivery of a plurality of video blocks is augmented to additionally include delivery of switched services by using an additional narrowband signal source to provide a narrowband signal and by using an additional coarse WDM (CWDM) to detect and select said switched services prior to introduction of said passively split combined broadcast signal to said WGR (col. 5, lines 17-40). At the time of the invention was made, it would have been obvious to an artisan to implement the teaching of Lu in the combination system of Thompson and Lam. One of skill in the art would have been motivated to do that in order to provide better service to customers and reduce cost for delivery of both switched services and analog-video broadcast over a PON (col. 3, lines 60-62 of Lu).

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Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- a. Iannone et al. U.S. patent no. 6,271,947. Simultaneous wavelength division multiplexing and broadcast transmission system
- b. Zirngibl U.S. patent no. 5,550,666. Wavelength division multiplexed optical source and broadband incoherent optical source
- 7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dzung D Tran whose telephone number is (571) 272-3025. The examiner can normally be reached on 9:00 AM 7:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kenneth Vanderpuye, can be reached on (571) 272-3078. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Dzung Tran 09/01/2005

KENMETHVANDERPUYE PRIMARY EXAMINER